

Title (en)
JOINT STRUCTURE

Title (de)
VERBINDUNGSSTRUKTUR

Title (fr)
STRUCTURE DE JOINT

Publication
EP 3437776 A4 20190508 (EN)

Application
EP 17774750 A 20170324

Priority
• JP 2016067198 A 20160330
• JP 2016077848 A 20160408
• JP 2017011976 W 20170324

Abstract (en)
[origin: EP3437776A1] A joint structure includes a first metallic material having a first projection, a second metallic material similar in type to the first metallic material and weldable to the first metallic material, and a different type of material having a first penetrating part and sandwiched between the first metallic material and the second metallic material, the different type of material being different in type from the first metallic material and the second metallic material and difficult to be welded to the first metallic material and the second metallic material. The first projection is smaller in diameter or width than the first penetrating part and is spaced from the rim of the first penetrating part by a first gap. The first projection is positioned in the first penetrating part and is spaced from the second metallic material by a second gap in the thickness direction of the first penetrating part. The second gap has a size of a predetermined percentage of the thickness of the first projection of the first metallic material to which arc welding is applied. The first metallic material and the second metallic material are melted and joined together inside the first penetrating part to compress and fix the different type of material, so that the different type of material, the first metallic material, and the second metallic material are fixed together.

IPC 8 full level
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Citation (search report)
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• [Y] US 2009278371 A1 20091112 - FUCHS JOHN P [US], et al
• [A] DE 102011085303 A1 20120503 - JOHNSON CONTROLS GMBH [DE]
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Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

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